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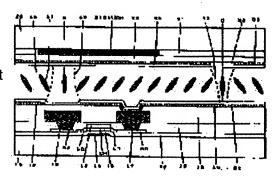
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## (54) LIQUID CRYSTAL DISPLAY DEVICE

## (57) Abstract:

PROBLEM TO BE SOLVED: To provide a liquid crystal display device of a wide visual field angle.

SOLUTION: Pixel electrodes 19 for liquid crystal driving are formed on planarization insulating films 18 covering thin-film transistors (TFTs) and perpendicular alignment layers 31 not subjected to a rubbing treatment are formed on these pixel electrodes 19. Alignment control windows 24 where electrodes are absent are formed in common electrodes 23 and perpendicular alignment layers 32 not subjected to the rubbing treatment are formed on the common electrodes 23. Liquid crystals having negative dielectric anisotropy are subjected to initial alignment control in a normal direction without having pretilts and the diagonal direction is controlled to the diagonal electric fields at the pixel electrode 19 ends and the alignment control window 24 ends by application of voltage, by which pixel division is



executed. The black matrices between the pixels are omitted and light shielding films 21BL are formed only in the regions corresponding to the TFTs, by which light leak currents are prevented.

## **LEGAL STATUS**

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